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Current Trends

Update: Acquired Immunodeficiency Syndrome (AIDS) among Patients with Hemophilia — United States

In 1982, six hemophilia A patients who had developed *Pneumocystis carinii* pneumonia (PCP) and other opportunistic infections and who met the CDC case definition of AIDS were reported by CDC (*1,2*). As of November 30, 1983, physicians and health departments in the United States have reported a total of 21 AIDS cases among hemophilia patients—19 among patients with hemophilia A and two among patients with hemophilia B. In addition, seven cases from outside the United States meeting the CDC definition of AIDS in association with hemophilia A have been brought to CDC's attention. Of the hemophilia cases in the United States, one was diagnosed in 1981; eight, in 1982; and 12, to date in 1983 (Figure 1). Two patients are known to have had other risk factors for acquiring AIDS.

To date, no cases of Kaposi's sarcoma have been reported in association with hemophilia; each patient had an opportunistic infection suggestive of an underlying cellular immunodeficiency. PCP was the most common opportunistic infection in hemophilia patients with AIDS and has occurred in 20 (95%) of the U.S. patients. Many of these patients have had other opportunistic infections, principally candidiasis, cryptococcosis, toxoplasmosis, and histoplasmosis, or infections with cytomegalovirus and *Mycobacterium avium-intracellulare*. The geographic distribution has included 15 states, with four cases each in the Mid-Atlantic, South Atlantic, and East North Central regions, three in the East South Central region, two each in the New England and West North Central regions, and one each in the Pacific and Mountain regions. No state was the residence for more than two patients.

The National Hemophilia Foundation (NHF) and CDC have conducted a mail survey of 116 hemophilia treatment centers (HTCs) designated by the NHF in the 48 contiguous states, which estimated the prevalence of AIDS-associated diseases from 1978 to 1982 among approximately 6,700 hemophilia patients; a separate review of U.S. deaths reported to the National Center for Health Statistics as being hemophilia-related was also included in the survey. This survey failed to identify any diagnoses suggestive of AIDS occurring among hemophilia patients before the first case diagnosed in September 1981 or any cases other than those reported here. In addition to the 21 reported U.S. hemophilia patients with AIDS, some patients with hemophilia have been reported with unexplained, possibly AIDS-associated phenomena that do not fit the CDC criteria for an AIDS diagnosis, including lymphadenopathy syndrome (*3*), thrombocytopenic purpura (*4*), and Burkitt's lymphoma (*5*).

AIDS – Continued

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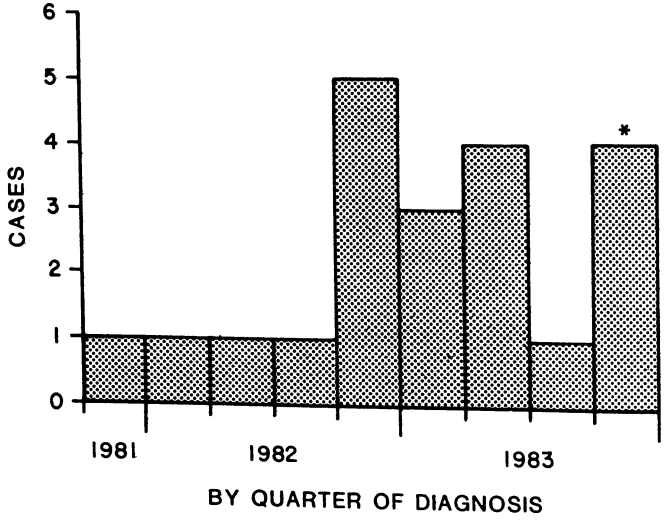
Editorial Note: Although the etiology of AIDS remains unknown, epidemiologic evidence suggests an infectious cause (*6, 7*). The possibility of blood or blood products as vehicles for transmission of AIDS to hemophilia patients is supported by the increased risk of AIDS in intravenous drug abusers (*8*) and reports of transfusion-associated AIDS cases (*9, 10*). Patients with hemophilia receive transfusions of anti-hemophilic factor and plasma factor concentrates prepared from pools of sera from 2,000 to 20,000 donors. Cryoprecipitate and plasma factor preparations are associated with the transmission of several known viral agents, including cytomegalovirus, hepatitis B virus, and the virus(es) of non-A, non-B hepatitis (*11*). However, at least nine U.S. hemophilia-associated AIDS patients also received other blood products in the 5 years preceding their AIDS diagnoses.

The NHF's Medical and Scientific Advisory Council has issued specific recommendations for managing hemophilia patients receiving blood and blood products (*12*). In addition, the U.S. Public Health Service has requested that persons at high risk of acquiring AIDS refrain from donating plasma and/or blood and that an extensive effort be undertaken to develop and

FIGURE 1. Acquired immunodeficiency syndrome (AIDS) among patients with hemophilia, by quarter of diagnosis – United States, October 1981-November 1983



*As of November 30, 1983.

AIDS – Continued

evaluate the use of laboratory tests for screening blood or blood products obtained from individuals in high-risk groups (*13,14*). Physicians diagnosing opportunistic infections or unusual neoplasms in hemophilia patients who have not received antecedent immunosuppressive therapy are encouraged to report these findings to local or state health departments and to CDC.

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Problems with the Performance of Passive Monitors for Formaldehyde

The existing standard for occupational exposures to formaldehyde, promulgated by the Occupational Safety and Health Administration, established a "permissible exposure limit" for formaldehyde of 3 parts per million as an 8-hour time-weighted average concentration (TWA) (*1*). Subsequently, when formaldehyde was recognized as a potential occupational carcinogen, the National Institute for Occupational Safety and Health (NIOSH) recommended that exposures be reduced to the lowest feasible levels (*2*). New technologies have emerged for detecting formaldehyde in the environment; a principal innovation is the "passive monitor."

Passive monitors, produced as badges to be worn on clothing or affixed to a wall, are devices that sample the environment for hazardous substances, such as formaldehyde. They

Passive Monitors – Continued

are "passive" in that they rely on unassisted molecular diffusion of the environmental agent in the air onto a sorbent material; the sorbent is then subjected to chemical analysis to determine the amount of formaldehyde adsorbed. This differs from the established practice of sampling, which utilizes a mechanical air pump to direct air, at a known flow rate, over a sorbent material, or through a liquid contained in an impinger; the material in the impinger is then quantitatively analyzed for formaldehyde. From these results, an estimate is made of the concentration of the agent in the tested air.

To study the efficacy of passive monitors, NIOSH developed draft specifications for performance, protocols for testing, and criteria for evaluation (*3*). They tested passive formaldehyde monitors* now being widely marketed in the United States. These tests compared the performance of the passive monitors with results from independent testing using established traditional methods (NIOSH Physical and Chemical Analysis Methods 125 [*4*], and 354 [*5*]), and chromatographic analysis of 2, 4, dinitrophenyl hydrazine-coated silica gel tubes (*6*) (Table 1).

*3M—Formaldehyde Monitors, Models 3750 and 3751. Use of trade names is for identification only and does not imply endorsement by the Public Health Service or the U.S. Department of Health and Human Services.

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TABLE I. Summary—cases specified notifiable diseases, United States

Disease	47th Week Ending			Cumulative, 47th Week Ending		
	November 26, 1983	November 27, 1982	Median 1978-1982	November 26, 1983	November 27, 1982	Median 1978-1982
Aseptic meningitis	197	174	157	10,913	8,724	7,676
Encephalitis: Primary (arthropod-borne & unspec.)	22	34	25	1,572	1,439	1,099
Post-infectious	1	-	6	67	72	201
Gonorrhea: Civilian	14,849	15,743	15,935	811,135	864,896	906,153
Military	386	253	382	21,860	23,735	24,490
Hepatitis: Type A	339	395	479	19,714	20,669	25,594
Type B	425	461	403	20,577	19,686	16,432
Non A, Non B	66	61	N	3,033	2,207	N
Unspecified	132	158	173	7,052	7,818	9,391
Legionellosis	10	22	N	646	557	N
Leprosy	2	3	2	215	187	187
Malaria	5	10	12	716	961	961
Measles: Total*	22	27	43	1,398	1,572	12,889
Indigenous	2	N	N	1,107	N	N
Imported	20	N	N	291	N	N
Meningococcal infections: Total	46	51	51	2,494	2,745	2,436
Civilian	46	51	51	2,479	2,731	2,418
Military	-	-	-	15	14	18
Mumps	55	58	103	3,000	4,832	7,903
Pertussis	29	12	21	2,051	1,569	1,538
Rubella (German measles)	11	10	37	916	2,177	3,548
Syphilis (Primary & Secondary): Civilian	520	587	528	29,177	29,794	24,651
Military	6	9	9	353	400	287
Toxic-shock syndrome	9	N	N	350	N	N
Tuberculosis	428	409	421	21,058	22,911	24,568
Tularemia	2	-	1	286	236	205
Typhoid fever	5	12	6	405	362	474
Typhus fever, tick-borne (RMSF)	2	3	4	1,136	944	1,023
Rabies, animal	77	91	75	5,404	5,709	5,709

TABLE II. Notifiable diseases of low frequency, United States

	Cum. 1983		Cum. 1983
Anthrax	-	Plague	36
Botulism: Foodborne	18	Poliomyelitis: Total	6
Infant (N.Y. City 1)	58	Paralytic (Mo. 1)	6
Other	3	Psittacosis (Iowa 1, Oreg. 1)	107
Brucellosis (La. 1)	164	Rabies, human	2
Cholera	1	Tetanus (Upstate N.Y. 1)	67
Congenital rubella syndrome	20	Trichinosis	31
Diphtheria	4	Typhus fever, flea-borne (endemic, murine)	43
Leptospirosis	42		

*Nineteen of the 22 reported cases for this week were imported from a foreign country or can be directly traceable to a known internationally imported case within two generations.

TABLE III. Cases of specified notifiable diseases, United States, weeks ending November 26, 1983 and November 27, 1982 (47th week)

Reporting Area	Aseptic Meningitis	Encephalitis		Gonorrhea (Civilian)		Hepatitis (Viral), by type				Legionellosis	Leprosy	Malaria
		Primary	Post-infectious			A	B	NA,NB	Unspecified			
	1983	Cum. 1983	Cum. 1983	Cum. 1983	Cum. 1982	1983	1983	1983	1983	1983	Cum. 1983	Cum. 1983
UNITED STATES	197	1,572	67	811,135	864,896	339	425	66	132	10	215	716
NEW ENGLAND	4	60	-	21,358	20,905	8	24	4	18	-	3	37
Maine	1	-	-	1,026	1,078	1	2	-	-	-	-	1
N.H.	-	5	-	652	697	-	-	-	-	-	2	2
Vt.	-	1	-	399	387	-	3	-	-	-	-	1
Mass.	1	30	-	9,133	9,358	-	4	2	16	-	-	17
R.I.	-	1	-	1,166	1,398	-	-	-	-	-	-	4
Conn.	2	23	-	8,982	7,987	7	15	2	2	-	1	12
MID ATLANTIC	35	118	6	103,802	109,209	49	96	11	13	-	26	98
Upstate N.Y.	26	32	-	16,828	18,103	2	22	2	3	-	-	29
N.Y. City	1	11	-	41,555	44,910	7	7	-	2	-	25	26
N.J.	5	17	1	19,240	19,844	6	29	1	7	-	-	25
Pa.	3	58	5	26,179	26,352	34	38	8	1	-	1	18
E.N. CENTRAL	64	552	20	115,216	124,457	34	47	2	13	6	6	52
Ohio	25	187	9	31,048	32,935	15	18	-	3	5	1	9
Ind.	4	180	1	11,394	15,181	7	4	1	2	-	-	7
Ill.	-	17	7	30,856	35,687	1	4	1	-	-	2	16
Mich.	35	111	-	31,418	29,721	11	20	-	8	1	3	15
Wis.	-	57	3	10,500	10,933	-	1	-	-	-	-	5
W.N. CENTRAL	2	155	10	37,652	40,629	17	9	1	-	1	6	28
Minn.	2	58	1	5,317	5,862	2	2	1	-	-	4	8
Iowa	-	57	-	4,233	4,339	2	2	-	-	-	-	4
Mo.	-	29	-	18,066	19,311	2	1	-	-	1	1	5
N. Dak.	-	4	-	406	529	-	-	-	-	-	-	2
S. Dak.	-	1	2	952	1,043	-	-	-	-	-	-	1
Nebr.	-	4	-	2,500	2,395	-	-	-	-	-	-	2
Kans.	-	2	7	6,178	7,150	11	4	-	-	-	1	6
S. ATLANTIC	30	220	15	211,408	226,867	17	77	5	7	2	13	119
Del.	2	1	-	3,891	3,752	-	-	-	-	-	-	1
Md.	7	23	-	27,352	28,611	4	20	2	1	-	1	23
D.C.	-	-	-	14,388	13,769	-	1	-	-	-	-	16
Va.	3	54	2	19,413	18,231	1	1	1	1	1	1	29
W. Va.	1	45	-	2,336	2,530	1	2	-	-	-	-	3
N.C.	7	46	-	32,599	35,884	-	2	-	-	-	2	3
S.C.	1	5	-	19,453	21,915	2	11	-	-	-	-	6
Ga.	2	8	1	43,999	44,775	3	16	1	-	-	1	10
Fla.	7	38	12	47,977	57,400	6	24	1	5	1	8	28
E.S. CENTRAL	18	66	2	67,902	74,477	7	20	3	-	-	-	14
Ky.	10	16	-	8,052	10,074	3	2	-	-	-	-	2
Tenn.	2	18	-	27,880	29,631	3	14	3	-	-	-	-
Ala.	4	24	-	20,901	21,466	-	3	-	-	-	-	7
Miss.	2	8	2	11,069	13,306	1	1	-	-	-	-	5
W.S. CENTRAL	11	155	2	114,446	118,803	59	21	4	48	-	33	62
Ark.	1	10	-	9,079	9,731	1	2	-	4	-	-	1
La.	2	19	-	22,463	21,374	-	-	1	-	-	1	8
Okla.	4	30	1	13,052	13,044	8	2	3	1	-	-	10
Tex.	4	96	1	69,852	74,654	50	17	-	43	-	32	43
MOUNTAIN	2	75	4	25,918	29,165	17	12	2	6	-	12	26
Mont.	-	2	-	1,101	1,225	-	1	-	-	-	-	-
Idaho	-	1	-	1,158	1,388	1	-	-	-	-	-	2
Wyo.	1	2	-	681	868	-	-	-	-	-	-	1
Colo.	-	45	-	7,287	7,796	2	3	1	1	-	2	10
N. Mex.	-	2	-	3,187	3,996	6	1	-	-	-	-	5
Ariz.	1	11	4	7,369	7,606	6	5	1	5	-	9	5
Utah	-	12	-	1,252	1,437	2	2	-	-	-	1	3
Nev.	U	-	-	3,883	4,849	U	U	U	U	U	-	-
PACIFIC	31	171	8	113,433	120,384	131	119	34	27	1	116	280
Wash.	2	13	1	8,582	10,417	5	13	3	-	-	16	14
Oreg.	-	-	4	6,088	7,207	28	9	2	-	-	1	11
Calif.	29	149	3	93,670	97,310	98	96	29	27	1	65	253
Alaska	-	-	-	2,958	3,120	-	-	-	-	-	-	-
Hawaii	-	9	-	2,135	2,330	-	1	-	-	-	34	2
Guam	U	-	-	103	127	U	U	U	U	U	-	2
P.R.	1	1	1	2,365	2,419	3	4	-	21	-	-	2
V.I.	-	-	-	262	255	1	2	-	-	-	-	-
Pac. Trust Terr.	U	-	-	-	388	U	U	U	U	U	-	-

U: Unavailable

TABLE III. (Cont.'d). Cases of specified notifiable diseases, United States, weeks ending November 26, 1983 and November 27, 1982 (47th week)

Reporting Area	Measles (Rubeola)					Menin-gococcal Infections	Mumps			Pertussis			Rubella		
	Indigenous		Imported*		Total										
	1983	Cum. 1983	1983	Cum. 1983	Cum. 1982	Cum. 1983	1983	Cum. 1983	Cum. 1982	1983	Cum. 1983	Cum. 1982	1983	Cum. 1983	Cum. 1982
UNITED STATES	2	1,107	20	291	1,572	2,494	55	3,000	4,832	29	2,051	1,569	11	916	2,177
NEW ENGLAND	-	5	-	15	14	133	2	137	181	2	70	52	-	17	19
Maine	-	-	-	-	-	10	-	22	43	-	5	4	-	-	-
N.H.	-	-	-	3	3	6	2	26	18	-	10	4	-	4	11
Vt.	-	-	-	-	2	10	-	15	7	-	8	2	-	5	-
Mass.	-	4	-	4	3	43	-	40	73	-	35	26	-	6	2
R.I.	-	-	-	-	-	9	-	16	17	-	5	11	-	-	1
Conn.	-	1	-	8	6	55	-	18	23	2	7	5	-	2	5
MID ATLANTIC	1	75	-	44	165	418	10	262	315	-	352	426	1	146	104
Upstate N.Y.	-	5	-	13	112	133	3	100	87	-	117	248	1	31	50
N.Y. City	1	44	-	27	43	74	4	39	47	-	53	39	-	86	35
N.J.	-	26	-	1	6	73	3	49	52	-	19	23	-	3	18
Pa.	-	-	-	3	4	138	-	74	129	-	163	116	-	26	1
E.N. CENTRAL	-	649	-	58	77	456	16	1,324	2,466	6	424	331	1	124	199
Ohio	-	72	-	15	1	135	7	562	1,636	3	147	91	-	2	2
Ind.	-	402	-	4	2	54	-	46	43	-	55	22	-	25	29
Ill.	-	173	-	33	24	133	1	152	294	2	119	154	1	54	75
Mich.	-	2	-	5	50	81	8	484	371	1	40	26	-	17	49
Wis.	-	-	-	1	-	53	-	80	122	-	63	38	-	26	44
W.N. CENTRAL	-	1	-	7	49	147	-	160	615	-	122	81	-	42	60
Minn.	-	1	-	-	-	27	-	28	453	-	47	34	-	9	6
Iowa	-	-	-	-	-	17	-	41	51	-	6	9	-	-	-
Mo.	-	-	-	1	2	68	-	21	13	-	15	16	-	-	38
N. Dak.	-	-	-	-	-	4	-	1	-	-	2	-	-	-	-
S. Dak.	-	-	-	-	-	4	-	-	1	-	8	6	-	-	1
Nebr.	-	-	-	-	3	5	-	4	1	-	2	1	-	-	-
Kans.	-	-	-	6	44	22	-	65	96	-	42	15	-	33	15
S. ATLANTIC	-	173	-	31	174	510	5	219	287	7	235	261	1	98	93
Del.	-	-	-	-	-	11	-	8	12	-	5	6	-	-	1
Md.	-	6	-	4	4	53	1	44	30	2	19	71	-	3	34
D.C.	-	-	-	-	1	5	-	-	-	-	-	1	-	-	-
Va.	-	10	-	13	14	76	-	35	39	-	50	28	-	3	12
W. Va.	-	-	-	-	3	2	1	54	99	-	9	10	-	-	3
N.C.	-	-	-	1	1	101	-	13	20	-	28	45	-	10	2
S.C.	-	-	-	4	-	50	-	14	17	-	14	16	-	1	1
Ga.	-	8	-	-	-	81	3	51	24	3	64	40	-	13	17
Fla.	-	149	-	9	151	131	N	-	46	2	46	44	1	68	23
E.S. CENTRAL	-	1	19	24	9	145	2	58	63	-	34	50	-	19	47
Ky.	-	-	-	1	1	29	-	21	20	-	14	6	-	18	29
Tenn.	-	-	-	-	6	50	2	31	25	-	9	26	-	-	2
Ala.	-	1	-	4	2	44	-	2	9	-	5	5	-	1	-
Miss.	-	-	19 †	19	-	22	-	4	9	-	6	13	-	-	16
W.S. CENTRAL	-	40	-	35	166	260	4	254	227	8	453	101	-	128	121
Ark.	-	5	-	8	-	22	1	3	7	2	25	6	-	-	2
La.	-	1	-	25	10	49	1	46	6	-	12	21	-	13	1
Okla.	-	1	-	-	30	33	N	-	-	6	325	6	-	-	3
Tex.	-	33	-	2	126	156	2	205	214	-	91	68	-	115	115
MOUNTAIN	-	-	-	18	29	112	4	172	110	1	221	67	1	38	85
Mont.	-	-	-	4	-	26	-	7	6	1	2	1	-	6	5
Idaho	-	-	-	10	-	8	-	8	4	-	15	12	-	8	7
Wyo.	-	-	-	-	1	2	-	3	2	-	6	3	1	7	7
Colo.	-	-	-	3	8	36	1	51	19	-	133	19	-	1	6
N. Mex.	-	-	-	-	-	7	N	-	-	-	14	7	-	-	6
Ariz.	-	-	-	1	17	20	3	90	51	-	29	21	-	8	16
Utah	-	-	-	-	3	12	-	8	20	-	22	4	-	7	26
Nev.	U	-	U	-	-	1	U	5	8	U	-	-	U	1	12
PACIFIC	1	163	1	59	889	313	12	414	568	5	140	200	7	304	1,449
Wash.	-	1	-	27	42	45	4	49	79	3	19	33	-	12	40
Oreg.	-	8	-	2	17	53	N	-	-	-	9	27	-	14	6
Calif.	1	153	1 §	28	824	205	8	329	457	2	105	112	7	276	1,390
Alaska	-	-	-	2	1	3	-	16	12	-	4	-	-	1	5
Hawaii	-	1	-	-	5	7	-	20	20	-	3	28	-	1	8
Guam	U	1	U	1	6	1	U	1	5	U	-	-	U	-	2
P.R.	-	94	-	-	177	11	7	133	91	-	13	21	-	7	12
V.I.	-	-	-	5	-	-	-	-	4	-	-	-	-	2	2
Pac. Trust Terr.	U	-	U	-	1	-	U	-	6	U	-	-	U	-	-

*For measles only, imported cases includes both out-of-state and international importations.

N: Not notifiable U: Unavailable †International §Out-of-state

TABLE III. (Cont.'d). Cases of specified notifiable diseases, United States, weeks ending November 26, 1983 and November 27, 1982 (47th week)

Reporting Area	Syphilis (Civilian) (Primary & Secondary)		Toxic-shock Syndrome	Tuberculosis		Tula-remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum. 1983	Cum. 1982	1983	1983	Cum. 1983	Cum. 1983	Cum. 1983	Cum. 1983	Cum. 1983
UNITED STATES	29,177	29,794	9	428	21,058	286	405	1,136	5,404
NEW ENGLAND	625	542	-	17	645	4	17	6	37
Maine	19	7	-	1	33	-	-	-	9
N.H.	21	5	-	3	34	-	-	1	5
Vt.	3	4	-	-	12	-	-	-	2
Mass.	400	369	-	6	342	3	13	2	14
R.I.	21	22	-	1	53	1	1	-	1
Conn.	161	135	-	6	171	-	3	3	6
MID ATLANTIC	3,749	3,988	-	73	3,783	1	70	27	240
Upstate N.Y.	279	419	-	12	638	1	11	7	72
N.Y. City	2,205	2,364	-	49	1,508	-	25	2	-
N.J.	756	582	-	12	785	-	28	8	24
Pa.	509	623	-	-	852	-	6	10	144
E.N. CENTRAL	1,501	1,780	4	36	2,840	4	62	77	453
Ohio	410	291	3	11	450	-	19	37	59
Ind.	118	190	-	3	324	-	4	14	30
Ill.	669	936	1	22	1,218	1	28	17	233
Mich.	222	273	-	-	701	1	10	7	20
Wis.	82	90	-	-	147	2	1	2	111
W.N. CENTRAL	349	505	-	8	627	84	11	61	746
Minn.	131	124	-	-	138	-	2	-	128
Iowa	21	31	-	-	53	-	-	-	184
Mo.	130	276	-	6	307	57	8	32	95
N. Dak.	2	7	-	-	6	-	-	1	80
S. Dak.	11	2	-	-	36	9	-	5	119
Nebr.	15	14	-	-	21	8	-	3	63
Kans.	39	51	-	2	66	10	1	20	77
S. ATLANTIC	8,003	8,141	2	103	4,269	13	57	473	1,966
Del.	31	24	-	2	58	-	-	4	5
Md.	531	446	-	7	343	5	8	40	741
D.C.	348	439	-	3	171	-	3	-	140
Va.	530	563	-	10	454	1	17	61	590
W. Va.	24	30	-	1	125	-	2	12	113
N.C.	788	667	-	40	684	6	4	205	26
S.C.	501	514	-	4	391	-	2	80	36
Ga.	1,428	1,690	-	13	742	1	2	65	196
Fla.	3,822	3,768	2	23	1,301	-	19	6	119
E.S. CENTRAL	1,947	2,067	-	26	1,886	18	10	106	351
Ky.	162	126	-	4	486	1	3	22	82
Tenn.	526	582	-	14	572	12	2	49	186
Ala.	762	773	-	7	475	-	2	24	83
Miss.	497	586	-	1	353	5	3	11	-
W.S. CENTRAL	7,546	7,848	1	76	2,551	116	56	371	965
Ark.	172	204	-	6	313	69	4	45	154
La.	1,562	1,706	-	20	361	7	4	1	34
Okla.	186	173	1	-	226	31	2	230	97
Tex.	5,626	5,765	-	50	1,651	9	46	95	680
MOUNTAIN	609	757	-	16	566	38	19	13	228
Mont.	7	5	-	-	42	5	1	6	66
Idaho	7	25	-	-	27	2	-	2	16
Wyo.	12	16	-	-	11	6	-	2	11
Colo.	145	204	-	6	83	14	1	-	32
N. Mex.	165	180	-	3	104	3	1	-	14
Ariz.	156	204	-	7	235	1	14	1	36
Utah	22	21	-	-	33	6	1	1	10
Nev.	95	102	U	U	31	1	1	1	43
PACIFIC	4,848	4,166	2	73	3,891	8	103	2	418
Wash.	163	156	-	3	219	2	5	-	2
Oreg.	137	104	-	-	165	3	3	-	1
Calif.	4,463	3,791	2	68	3,227	2	92	2	400
Alaska	12	15	-	-	65	1	-	-	15
Hawaii	73	100	-	2	215	-	3	-	-
Guam	-	1	U	U	5	-	-	-	-
P.R.	820	762	-	11	433	-	-	-	47
V.I.	17	28	-	-	2	-	1	-	-
Pac. Trust Terr.	-	-	U	U	-	-	-	-	-

U: Unavailable

TABLE IV. Deaths in 121 U.S. cities,* week ending November 26, 1983 (47th week)

Reporting Area	All Causes, By Age (Years)						P&I** Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	595	420	113	32	15	15	54
Boston, Mass.	177	114	44	7	6	6	25
Bridgeport, Conn.	50	37	8	2	1	2	4
Cambridge, Mass.	8	8	-	-	-	-	-
Fall River, Mass.	16	15	1	-	-	-	-
Hartford, Conn.	51	29	14	6	2	-	-
Lowell, Mass.	19	15	2	1	1	-	1
Lynn, Mass.	14	11	1	1	1	-	-
New Bedford, Mass.	33	27	5	1	-	-	2
New Haven, Conn.	47	29	6	6	2	4	2
Providence, R.I.	43	33	6	1	-	3	5
Somerville, Mass.	9	8	1	-	-	-	-
Springfield, Mass.	34	24	9	1	-	-	1
Waterbury, Conn.	32	25	3	3	1	-	6
Worcester, Mass.	62	45	13	3	1	-	8
MID. ATLANTIC	2,294	1,519	530	139	51	55	100
Albany, N.Y.	52	33	13	-	3	3	1
Allentown, Pa.	20	15	5	-	-	-	-
Buffalo, N.Y.	93	65	19	6	2	1	10
Camden, N.J.	23	13	6	3	-	1	2
Elizabeth, N.J.	20	14	5	-	1	-	-
Erie, Pa.†	36	20	13	2	-	1	3
Jersey City, N.J.	41	27	9	3	-	2	-
N.Y. City, N.Y.	1,321	870	300	99	26	26	42
Newark, N.J.	41	20	11	5	1	4	4
Paterson, N.J.	28	14	8	3	-	3	3
Philadelphia, Pa.†	194	120	52	8	6	8	14
Pittsburgh, Pa.†	56	39	16	1	-	-	1
Reading, Pa.	28	25	2	1	-	-	3
Rochester, N.Y.	108	77	17	6	4	4	8
Schenectady, N.Y.	41	29	12	-	-	-	2
Scranton, Pa.†	21	17	3	-	1	-	1
Syracuse, N.Y.	92	62	23	1	4	2	3
Trenton, N.J.	30	18	11	-	1	-	1
Utica, N.Y.	26	21	4	-	1	-	-
Yonkers, N.Y.	23	20	1	1	1	-	2
E.N. CENTRAL	1,929	1,250	467	113	49	50	76
Akron, Ohio	30	21	8	-	-	1	-
Canton, Ohio	33	25	7	1	-	-	1
Chicago, Ill.	474	303	117	34	15	5	7
Cincinnati, Ohio	92	61	24	-	3	4	13
Cleveland, Ohio	147	89	42	7	4	5	5
Columbus, Ohio	129	81	34	11	-	3	-
Dayton, Ohio	64	40	19	3	1	1	-
Detroit, Mich.	230	129	62	25	6	8	9
Evansville, Ind.	47	40	4	2	-	1	-
Fort Wayne, Ind.	40	29	8	-	2	1	2
Gary, Ind.	19	7	8	1	2	1	1
Grand Rapids, Mich.	22	19	1	1	1	-	-
Indianapolis, Ind.	152	87	40	11	6	8	3
Madison, Wis.	43	32	6	4	-	1	5
Milwaukee, Wis.	88	68	13	4	1	2	6
Peoria, Ill.	58	42	13	1	1	1	10
Rockford, Ill.	41	28	10	-	2	1	4
South Bend, Ind.	30	18	9	1	-	2	2
Toledo, Ohio	135	88	33	6	3	5	7
Youngstown, Ohio	55	43	9	1	2	-	1
W.N. CENTRAL	583	401	112	28	16	21	23
Des Moines, Iowa	37	31	3	1	2	-	1
Duluth, Minn.	18	12	5	1	-	-	1
Kansas City, Kans.	20	13	2	2	2	1	-
Kansas City, Mo.	144	91	36	6	3	3	5
Lincoln, Nebr.	19	15	1	1	2	-	1
Minneapolis, Minn.	54	34	8	4	3	5	1
Omaha, Nebr.	60	45	7	3	2	3	1
St. Louis, Mo.	149	104	33	5	1	6	9
St. Paul, Minn.	42	26	11	3	-	2	1
Wichita, Kans.	40	30	6	2	1	1	3
S. ATLANTIC	1,021	622	244	81	25	49	40
Atlanta, Ga.	132	95	22	8	3	4	3
Baltimore, Md.	80	38	22	10	3	7	2
Charlotte, N.C.	63	33	18	6	3	3	3
Jacksonville, Fla.	68	43	20	4	-	1	5
Miami, Fla.	189	113	44	15	10	7	4
Norfolk, Va.	54	28	13	3	1	9	4
Richmond, Va.	58	34	17	3	1	3	5
Savannah, Ga.	26	17	7	-	-	2	3
St. Petersburg, Fla.	75	63	8	2	1	1	2
Tampa, Fla.	46	29	13	1	1	2	1
Washington, D.C.	168	83	50	23	2	10	4
Wilmington, Del.	62	46	10	6	-	-	4
E.S. CENTRAL	540	343	124	38	21	14	30
Birmingham, Ala.	100	68	22	4	5	1	3
Chattanooga, Tenn.	45	28	12	2	3	-	7
Knoxville, Tenn.	44	31	7	3	1	2	2
Louisville, Ky.	67	42	20	1	2	2	4
Memphis, Tenn.	98	65	17	9	5	2	6
Mobile, Ala.	58	33	16	8	1	-	2
Montgomery, Ala.	22	14	4	2	2	-	1
Nashville, Tenn.	106	62	26	9	2	7	5
W.S. CENTRAL	1,140	652	277	117	46	47	37
Austin, Tex.	69	45	11	8	5	-	-
Baton Rouge, La.	50	28	15	4	1	2	3
Corpus Christi, Tex.	39	24	10	4	-	1	3
Dallas, Tex.	154	84	40	13	5	12	1
El Paso, Tex.	33	19	7	3	2	2	3
Fort Worth, Tex.	74	44	20	1	4	4	3
Houston, Tex.	341	172	84	49	21	15	5
Little Rock, Ark.	61	32	16	9	1	3	7
New Orleans, La.	86	45	19	13	4	5	-
San Antonio, Tex.	104	69	23	8	2	2	5
Shreveport, La.	57	37	18	1	1	-	2
Tulsa, Okla.	72	53	14	4	-	1	5
MOUNTAIN	579	383	121	36	26	13	20
Albuquerque, N.Mex.	47	24	14	5	4	-	4
Colo. Springs, Colo.	28	17	9	-	1	1	3
Denver, Colo.	132	91	19	10	9	3	4
Las Vegas, Nev.	59	35	17	5	1	1	1
Ogden, Utah	27	16	8	-	2	1	1
Phoenix, Ariz.	145	103	26	10	5	1	4
Pueblo, Colo.	17	13	2	2	-	-	-
Salt Lake City, Utah	45	24	15	1	2	3	-
Tucson, Ariz.	79	60	11	3	2	3	3
PACIFIC	1,610	1,045	353	113	48	50	83
Berkeley, Calif.	19	15	2	1	1	-	-
Fresno, Calif.	63	45	13	3	1	1	6
Glendale, Calif.	12	7	5	-	-	-	2
Honolulu, Hawaii	45	20	14	9	1	1	3
Long Beach, Calif.	83	54	18	5	2	4	3
Los Angeles, Calif.	507	302	130	47	18	10	14
Oakland, Calif.	74	50	12	2	4	6	5
Pasadena, Calif.	17	16	1	-	-	-	-
Portland, Oreg.	124	97	16	5	-	6	10
Sacramento, Calif.	52	29	15	3	1	3	3
San Diego, Calif.	135	80	29	13	7	6	11
San Francisco, Calif.	137	80	38	12	2	5	3
San Jose, Calif.	134	91	26	7	7	3	11
Seattle, Wash.	149	117	21	4	3	4	8
Spokane, Wash.	31	25	5	1	-	-	2
Tacoma, Wash.	28	17	8	1	1	1	2
TOTAL	10,291††	6,635	2,341	697	297	314	463

* Mortality data in this table are voluntarily reported from 121 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

** Pneumonia and influenza

† Because of changes in reporting methods in these 4 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

†† Total includes unknown ages.

Passive Monitors – Continued

Testing of passive monitors, as marketed, consistently produced estimates of formaldehyde concentrations that were lower than those determined by the established sampling methods. Equilibration of the badges in an atmosphere of high humidity (92%) before exposure to the test atmosphere provided results comparable to results from traditional methods. This suggests that the discrepant performance of the passive monitors may be explained by a loss of moisture from the sorbent and/or operation in atmospheres with low humidity (based on laboratory tests, up to 40%).

Based on these findings, NIOSH concluded that the use of such badges, as marketed, cannot be relied on to produce consistently accurate measures of formaldehyde in the environment. NIOSH has notified the manufacturer of these findings.

Reported by Methods Research Br, Div of Physical Sciences and Engineering, NIOSH, CDC.

Editorial Note: Similar findings have been reported by other investigators (*7*), and NIOSH and CDC's Center for Environmental Health have received a number of telephone calls from state and local health agencies and from private individuals concerning the household use of these devices. Passive monitors for formaldehyde have been used to test for formaldehyde in the air of some 10,000 U.S. homes (*8*). Based on the findings reported above, the results of such tests should be interpreted with caution.

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8. Anders LW, Shor RM. Formaldehyde concentrations measured in U.S. residences by diffusional samplers and impingers. Paper no. 20 presented at the 1983 American Industrial Hygiene Conference, Philadelphia, Pennsylvania, May 22-27, 1983.

TABLE 1. Average results of tests for formaldehyde in air: comparison of passive monitors with other methods

Test system	Number of tests	Concentration ± 95% confidence interval (parts per million)
P&CAM 125	4	1.95 ± 0.35
P&CAM 354	4	1.73 ± 0.28
2,4-DNP	4	1.93 ± 0.35
Passive monitors (as marketed)	6	0.59 ± 0.06
Passive monitors (pre-equilibrated)*	12	1.80 ± 0.04

*In high humidity

Biologic Safety

The World Health Organization (WHO) laboratory biosafety manual, produced by the Special Program on Safety Measures in Microbiology (SMM), is now available.* It provides internationally applicable guidance on biosafety developed by several expert working groups.

Recognizing that laboratory accidents and infections are caused primarily by poor practice and technique, the manual emphasizes safe practice and training procedures. It also presents basic standards of laboratory design for work with microorganisms by degree of infective risk and a guide to selecting and using essential biosafety equipment and materials. Although oriented to biosafety, the manual also provides an overall, general laboratory safety checklist and safety procedures for using and handling laboratory chemicals.

Other sections of the manual deal with the organization and management of safety programs, safe shipment of specimens and infectious substances, and contingency plans and emergency procedures. An extensive bibliography and a list of audiovisual training aids are included.

The manual is intended primarily for the guidance and use of laboratory supervisors, biosafety officers, and others responsible for laboratory safety programs.

Training Workshops

Orientation and training in laboratory biosafety have been a major effort of the SMM Program. To develop a global network of biosafety expertise, a series of "train-the-trainer" workshops has been conducted, and biosafety collaborating centers are being established. The WHO Regional Office for the Americas conducted the first course in June 1981 at the Public Health Institute, Sao Paulo, Brazil, the second in May 1982 at the Caribbean Epidemiology Centre (CAREC) in Trinidad and Tobago, and the third in November 1983 at the Pan American Zoonoses Centre in Argentina. A country-level course was held in July 1982 at the National Institute of Virology in Pune, India, under the auspices of the Regional Office for Southeast Asia and the Indian Council of Medical Research.

In June 1983, a global workshop was held at the WHO Biosafety Collaborating Centre, National Institutes of Health, Bethesda, Maryland. Twenty-one senior laboratory scientists representing 16 countries and the six WHO Regions attended. The participants, selected by the Regional Offices, will conduct regional and country-level biosafety courses, participate in other laboratory-oriented training courses, and be available to provide assistance to individual countries and laboratories on request.

Expert assistance and advice on special biosafety matters may be obtained from any of the following institutions:

1. The Division of Safety (WHO Collaborating Centre), National Institutes of Health, Bethesda, Maryland.
2. The Environmental Microbiology and Safety Reference Laboratory (WHO Collaborating Centre), Public Health Laboratory Service Centre for Applied Microbiology and Research, Porton Down, England.
3. The Bureau of Infection Control (WHO Collaborating Centre), Laboratory Centre for Disease Control, Ottawa, Canada.
4. National Institute of Virology, Pune, India.
5. Office of Biosafety, Centers for Disease Control, Atlanta, Georgia.

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*_Laboratory Biosafety Manual._ Geneva: World Health Organization, 1983. 123 pages. Price: Sw. fr 14. Arabic, French, and Spanish editions in preparation.

Biologic Safety — Continued

Within the year, five additional institutions will be designated as WHO Biosafety Collaborating Centres.

Advanced professional training in biosafety is available at the School of Public Health, University of North Carolina, Chapel Hill, North Carolina 27514. Both master's and doctor of public health degrees in biohazard science are offered in the program established in 1979. Information may be obtained by writing to the Director. Additional information or assistance on biosafety may be obtained by contacting the Regional Offices or the Special Program on Safety Measures in Microbiology, WHO Headquarters, Geneva.

Reported by WHO Weekly Epidemiological Record *1983;58:289-90.*

Editorial Note: Implementation of recommendations in the WHO manual should be useful in standardizing biosafety practices internationally. However, individual countries are expected to exercise judgment in determining the applicability of these recommendations within their countries, and some variations in acceptable biosafety practices are, therefore, expected from country to country. A collaborative effort that included input from biomedical scientists has been organized by CDC and NIH to develop a manual, *Biological Safety in Microbiological and Biomedical Laboratories,* which is expected to provide guidance specifically applicable to microbiological and biomedical laboratories in the United States. The manual will be available in early 1984.

Errata: Vol. 32, No. 35

p. 464. In the article, "*Arizona hinshawii* Septicemia Associated with Rattlesnake Powder—California," the following names should be included in the credits on p. 465: L Frank, C Quint, Communicable Disease Bureau, Alameda County Health Care Svcs, Oakland, California.

Vol. 32, No. 39

p. 518. In the article, "Neonatal Gonococcal Ophthalmia—California," the second sentence of the Editorial Note on p. 519 should read: "Recent reports have shown that penicillinase-producing *N. gonorrhoeae* can cause gonococcal ophthalmia despite prophylaxis with silver nitrate (*1*)." No cases of penicillinase-producing *N. gonorrhoeae* (PPNG) ophthalmia have been reported with erythromycin prophylaxis. The PPNG-ophthalmia neonatorum cases have occurred with either silver nitrate or no prophylaxis.

The *Morbidity and Mortality Weekly Report* is prepared by the Centers for Disease Control, Atlanta, Georgia, and available on a paid subscription basis from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, (202) 783-3238.

The data in this report are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the succeeding Friday.

The editor welcomes accounts of interesting cases, outbreaks, environmental hazards, or other public health problems of current interest to health officials. Such reports and any other matters pertaining to editorial or other textual considerations should be addressed to: ATTN: Editor, *Morbidity and Mortality Weekly Report,* Centers for Disease Control, Atlanta, Georgia 30333.

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